

Joint Fire Science Program Publication Survey—Feedback from Fire Professionals

Final Report

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Abstract

The Joint Fire Science Program (JFSP) was established by Congress in 1998 to provide a scientific basis and rationale for fire and fuel management activities. The JFSP encourages and disseminates science that is tailored to meet the needs of fire professionals. They also encourage new lines of science that are responsive to practitioners' needs. The JFSP works to bridge the gap between researchers and practitioners by publishing research in a way that is understandable and useful. Currently, the JFSP publishes *Fire Science Digest*, *Synthesis of Knowledge*, and *eNews* a bi-weekly newsletter. The *Fire Science Brief* is no longer being published but past issues are available online.

A survey was conducted among fire professionals to determine their perceptions of JFSP publications and preferences for format and delivery method. Many of the fire professionals surveyed agreed that the information presented in the JFSP publications is easily understood because the writing was not too technical or elementary, key findings and implications are clearly stated. Respondents stated that the publications were useful because they always or sometimes learned something new, enhanced their understanding, and directly relevant to their jobs. The JFSP disseminates the most current research through a variety of channels such as social media, websites, email and print. However, this research found that practitioners and decision makers prefer to receive information on fire ecology and fire management through links in an email and from the JFSP website. The most preferred delivery method is email but only twenty-eight percent of respondents subscribe to *eNews*. The most preferred formats are print, videos, and printable pdfs.

JFSP publications are comparable to *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire (IJWF)* in that they are a trusted source of information, useful, and relevant. The JFSP publications are more easily accessible and understandable than *Fire Ecology* and *IJWF*. The *Fire Science Digest* should include boxes that highlight key findings and implications because most respondents scan the publication or look for specific topics and information. The survey should be conducted again in five to ten years to see if perceptions of JFSP publications and preferences for format and delivery methods change due to new technology and a changing demographic.

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Introduction

The Joint Fire Science Program (JFSP) was established in 1998 by Congress to provide a scientific basis and rationale for fire and fuel management activities. The mission of the Joint Fire Science Program has four parts: 1) Provide credible research that is relevant to the needs of fire and fuels managers, 2) Listen to the needs of managers and then respond to those needs, 3) Solicit proposals from scientists, and 4) As research is completed, focus on delivering research through a variety of channels so that managers are aware, understand, and use the information in management decisions. The various channels include Twitter, Facebook, email, print, blogs and the JFSP website. Using these various channels, the Joint Fire Science Program notifies individuals of funding opportunities for projects relating to fuel treatment effectiveness, effects of smoke, fire social sciences, and the compatibility of fire and fuel treatments with wildlife through these various channels (Joint Fire Science Program).

There are fourteen Knowledge Exchange Consortia within the Joint Fire Science Program (Figure 1). The consortia help connect managers, practitioners, and scientists in a specific working area. The consortia sponsor conferences, webinars, workshops, and describe and list relevant research on their websites. Each consortium uses a variety of methods to disseminate information on new publications, webinars and upcoming events. Delivery methods include email, Twitter, blogs and Facebook. A few of the consortia use Vimeo and YouTube so one can view past webinars or videos. A comparison of delivery methods among the consortia is presented in Appendix A.

JFSP Knowledge Exchange Consortia



Figure 1. A map of how the 14 JFSP Knowledge Exchange Consortia are divided according to area (Joint Fire Science Program).

The Joint Fire Science Program currently publishes the *Fire Science Digest*, *eNews*, and *Synthesis of Knowledge*. The *Fire Science Digest* is a news story publication that summarizes research on a particular topic and is written by science writers. The *Digest* has covered topics such as smoke, climate change, knowledge exchange and new tools for planning. It is published several times a year and is available in print, online and as an E-Pub for e-readers/tablets. *eNews* is a bi-weekly newsletter that is emailed to subscribers and is available on the JFSP website. *eNews* notifies subscribers of new JFSP publications, funding opportunities and current research. The *Synthesis of Knowledge* covers one broad topic per issue with chapters that contain information on specific sub-topics. It is published periodically and is available online. Past topics include fuel management, fire management, Wildland-Urban Interface, fire

effects, and post-fire treatments. The JFSP no longer publishes *Fire Science Brief*, but past issues are available through their website. *Fire Science Brief* is a news story written by science writers that summarizes research one topic. Each issue is approximately six pages and highlights one to three scientists' research.

The purpose of this research was to determine if the Joint Fire Science Program should continue investing resources in the publication of *Fire Science Digest*, *eNews*, and *Synthesis of Knowledge*, or bring back *Fire Science Brief*. The objectives of the survey were to determine the usefulness, understandability and accessibility of the JFSP's publications.

Methods

To understand the audience for these publications we surveyed fire professionals and fire science researchers who belong to the JFSP Consortia. The Joint Fire Science Program Consortia provided us with contact information for fire professionals and researchers to be surveyed. We conducted an online survey to evaluate the Joint Fire Science Program publications. The survey was created and distributed in collaboration with the Joint Fire Science Program using SurveyMonkey. The approximate fifteen minute survey included 25 multiple-choice questions and three open ended questions. A copy of the survey is provided in Appendix C. The survey included questions on:

- Awareness of JFSP and its publications
- Readership of each publication-duration, frequency, how respondents typically read publications, and trust in the publication as a source of information
- Usefulness of each publication-did respondents learn anything new, enhances their understanding of fire ecology and/or fire management, relevance to job, and if respondents use the information in day-to-day management decisions

- Understandability of information presented in each publication-respondents were asked to rate the technicality using a scale ranging from 1 to 5, one being too technical and 5 being too elementary
- Ease on obtaining a copy of each publication-respondents were asked to use a scale ranging from 1 to 5, one being very easy to obtain 5 being very difficult to obtain
- Respondents were asked about topics of interests, what is appealing about a publication and what is one thing they would change
- Preferences for what formats to get information on fire management and/or fire ecology and delivery methods for receiving information on fire management and/or fire ecology

We included *Fire Ecology*, *International Journal of Wildland Fire* and *Fire Management Today* in the survey for comparison to the Joint Fire Science Program publications because the JFSP wanted to know how their publications compare to other fire related publications. *Fire Ecology* and *International Journal of Wildland Fire* are peer reviewed journal that follow the IMRAD format. *Fire Management Today* is a quarterly publication produced by the Forest Service Fire and Aviation Management. These publications focus on providing information on fire ecology, fire management and applied fire research. We created a matrix comparing these publications, the JFSP publications and various US Forest Service research stations publications on format and delivery methods (Appendix A). A comparison of information delivery methods used by federal land management agencies is also provided in Appendix A.

A web link to the survey was given to nine of the consortia to distribute through their list-serves. The Southern Rockies and Appalachians Consortia provided us with email lists to send the web link to survey participants. The Pacific, Tallgrass, and Oak Woodlands Consortia did not participate in the distribution of the survey web link. The survey link was sent to

approximately 8,433 individuals. Individuals may have received more than one invitation to survey if they are on multiple list-serves.

The survey was administered between January 26, 2013 and April 7, 2013. We used the Dillman Tailored Design Method in the administering the survey (Dillman, 2007). A reminder email was sent a week after the initial invitation. A second reminder/thank you email was sent out two weeks after the first reminder. Five weeks after the second reminder, we emailed a final thank you for their participation. The Great Plains consortium sent out only the initial invitation and the Alaska consortium sent the initial invitation and the first follow up.

The web link to the survey was posted on the Joint Fire Science Program's Facebook page, blog and twitter account. We do not know how many individuals saw the invitation to take the survey; hence we cannot calculate an overall response rate. Four hundred and ninety-four respondents completed the survey. We conducted a descriptive analysis of the survey data using SPSS (IBM, 2012) to determine perceptions and preferences of respondents of JFSP publications. Open ended questions were analyzed and categorized into general topics and themes.

Limitations

Whether or not the sample of respondents was representative of members of the JFSP consortia was of primary concern in this research because the actual distribution of the survey link was conducted by multiple entities. To determine if our sample was representative of the JFSP consortia members, we compared the job titles provided to some of the consortia to those of our sample. Not all of the JFSP consortia gather information on their members' employment and their job classification categories are not consistent across the consortia that do gather

such information. However, the sample of JFSP consortia members used in this research appears to be fairly representative of the consortia based on job title.

Questions that were asked later in our survey had larger percentages of missing values than questions located at the beginning of the survey. While this could be due to the design of the questionnaire, it could also be an artifact of using a web-based survey. While internet surveys can minimize costs because there are no postage or printing costs, using web based surveys across a broad range of participants as we did can result in incomplete surveys due to differences in web browser timing out and the speed at which the survey is updated on a respondent's computer (Dillman, 2007).

Results

Results are divided into two main sections: a profile of survey respondents and a comparison of the publications. Respondent profile includes demographics, years of experience, job position, consortia affiliation, awareness of the JFSP, what JFSP publications and other publications are read, and preferences for delivery methods and formats. The second section provides a comparison of the usefulness, understandability and accessibility of JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire*. Responses to questions on usefulness, understandability and accessibility for each individual JFSP publication are provided in Appendix B. Contingency tables comparing the usefulness, understandability, and accessibility of JFSP publications and the three fire-related journals are provided in Appendix D.

Respondent Profile

Respondents represent a variety of age groups. Sixty-one percent of the respondents were between the ages of 40 and 59. Four percent of the respondents were between the ages of 18 and 29 (Table 1).

Table 1. Respondents' age (n= 494).

| | Percent |
|-------------------|---------|
| 18-29 years | 4.0 |
| 30-39 years | 20.9 |
| 40-49 years | 25.7 |
| 50-59 years | 36.2 |
| 60-69 years | 10.9 |
| 70 years or older | 2.2 |

Respondents to the survey were well educated. Approximately fifty-two percent of individuals hold a graduate degree and ten percent have less than a four year degree (Table 2).

Table 2. Respondents' education level (n = 494).

| | Percent |
|-------------------------|---------|
| Less than 4 year degree | 9.9 |
| 4 year degree | 38.5 |
| Graduate Degree | 51.6 |

Researchers made up the largest job category followed by fire managers. The "other" category included a variety of job titles such as foresters, wildlife biologists, silviculturists, and ecologists (Table 3).

Table 3. Respondents' job type (n = 494).

| | Percent |
|-------------------------------------|---------|
| Field Technician | 4.3 |
| Fuels Planner/Fuel Manager | 7.7 |
| Fire Ecologist | 8.1 |
| Fire Manager | 13.8 |
| Staff & Line Officer/Decision-Maker | 10.7 |
| Researcher | 24.3 |
| Other | 31.2 |

Respondents to the survey have a lot of experience in fire science or as a fire professional.

Sixty-five percent of the respondents have eleven or more years and thirty-five percent have ten years or less of experience (Table 4).

Table 4. Respondents' years of experience in fire science or as a fire professional (n = 494).

| | Percent |
|------------------|---------|
| Less than 1 year | 6.7 |
| 1-5 years | 10.7 |
| 6-10 years | 18.0 |
| 11-20 years | 29.4 |
| 21 or more years | 35.2 |

Respondents were asked to indicate which of the JFSP consortia they were most closely affiliated with. The Southern Consortium had the most affiliated respondents and the Pacific and Oak Woodlands Consortia had the least (Table 5).

Table 5. JFSP regional consortium that respondents most closely affiliated with (n = 494).

| | Percent |
|-------------------------------|---------|
| Alaska | 4.9 |
| Appalachian | 3.2 |
| California | 11.9 |
| Great Basin | 5.1 |
| Great Plains | 3.8 |
| Lake States | 6.9 |
| Oak Woodlands | 1.2 |
| Northern Rockies | 8.7 |
| Northwest | 7.9 |
| Pacific | 1.2 |
| Southern | 16.2 |
| Southern Rockies | 9.5 |
| Southwest | 8.3 |
| Tallgrass Prairie/Oak Savanna | 2.8 |
| Not applicable | 8.3 |

The vast majority of survey respondents were aware of the Joint Fire Science Program (Table 6).

Table 6. Respondents' awareness of the JFSP (n = 814).

| | Percent |
|-----|---------|
| Yes | 94.2 |
| No | 5.8 |

Of the four JFSP publications, The *Fire Science Digest* was the most read JFSP publication. Fifty-five percent of respondents read *Fire Science Digest*. Twenty-nine percent of respondents had not read any of the JFSP publications (Table 7).

Table 7. JFSP publications read by respondents (n = 795).

| | Percent |
|------------------------|---------|
| Fire Science Digest | 55.2 |
| Fire Science Brief | 51.9 |
| Synthesis of Knowledge | 34.8 |
| None of them | 29.3 |

In addition to the publications included in the survey, we asked respondents if they subscribed to Firescience.gov eNews, the weekly newsletter. Twenty-eight percent of respondents indicated they subscribe (Table 8).

Table 8. Respondents currently receiving Firescience.gov eNews (n = 504).

| | Percent |
|-----|---------|
| Yes | 28.4 |
| No | 71.6 |

Eighty percent of respondents have been to the JFSP website and 72 percent access the featured publications on the JFSP homepage (Tables 9 and 10).

Table 9. Respondents who have been to the JFSP website (n =504).

| | Percent |
|-----|---------|
| Yes | 80.6 |
| No | 19.4 |

Table 10. How often respondents access featured publications on JFSP homepage (n = 495).

| | Percent |
|-----------|---------|
| Regularly | 9.5 |
| Sometimes | 62.2 |
| Never | 28.3 |

A question was included about what other publications respondents read. These publications are from U.S. Forest Service research stations, National Park Service and BIA/NIFC. The Pacific Northwest Research Station’s *Science Findings* and Rocky Mountain Research Station’s *Science You Can Use Bulletin* are two other publications that are most read by respondents. Forty-eight percent of respondents indicated that they do not read *CompassLive*, *Science Findings*, *Science You Can Use*, *Smoke Signals*, or *Park Science* (Table 11).

Table 11. Other publications respondents read (n = 495).

| Publications | Percent |
|--|---------|
| USFS Southern Research Station <i>CompassLive</i> | 14.5 |
| USFS Pacific Northwest Research Station <i>Science Findings</i> | 22.6 |
| USFS Rocky Mountatin Research Station <i>Science You Can You Bulletin</i> | 22.4 |
| BIA/NIFC <i>Smoke Signals</i> | 10.7 |
| National Park Service <i>Park Science</i> | 13.1 |
| None of them | 48.7 |

We asked respondents to indicate how they preferred to get information on fire management and/or fire ecology. The most preferred method was printable traditional pdfs and the least preferred was a podcast (Table 12). Podcasts could be least preferred because one must have a portable media player to listen to them.

Table 12. Formats respondents prefer to get information on fire ecology and fire management (n = 495).

| | Percent |
|----------------------------|---------|
| Print | 30.7 |
| Printable traditional pdf | 82.8 |
| Mobile (smartphone/tablet) | 18 |
| Podcast | 11.7 |
| Videos | 24.2 |
| Other | 11.7 |

The most preferred delivery method to receive information on fire management and/or fire ecology is through email and least is Scribd (Table 13). Seventy-five percent of survey respondents were over 40 years old which could partly explain their preference for more traditional delivery methods such as email, print and directly going to the JFSP website.

Table 13. Delivery methods respondents prefer to receive information on fire management and fire ecology (n = 495).

| | Percent |
|--------------|---------|
| Print | 43.8 |
| JFSP Website | 63.8 |
| Email | 75.4 |
| Scribd | 1.4 |
| Twitter | 4.4 |
| Facebook | 10.9 |
| You Tube | 12.5 |
| Vimeo | 3.4 |
| iTunes | 4.2 |
| Blogs | 6.5 |
| Other | 6.5 |

We included an open-ended question in the survey asking respondents to list topics of particular interest that they would like to see in JFSP publications. The following list contains the ten most often mentioned topics (n=505):

- Prescribed Burning
- Fire Effects
- Smoke
- Fuels Treatment
- Fire Behavior
- Fire Ecology
- Social Science
- Management
- Climate Change
- Education

Comparisons Among Publications

We included *Fire Ecology*, *International Journal of Wildland Fire* and *Fire Management Today* in the survey for comparison to the Joint Fire Science Program publications. The publications are compared on three criteria: usefulness, understandability and accessibility.¹ The Association for Fire Ecology began publishing the on-line journal *Fire Ecology* in 2005. *Fire Ecology* is published three times a year and contains peer reviewed articles and is an open access journal (Association for Fire Ecology, 2012). *Fire Management Today* is a quarterly publication produced by the U.S. Forest Service Fire and Aviation Management Program. *Fire Management Today* was first published in 1936 under the name *Fire Control Notes*. Then in the 1970s the name was changed to *Fire Management Notes*, and in 2000 the name was changed to *Fire Management Today*. *Fire Management Today* provides a forum for fire professionals to

¹ Tables of the data used in the comparison among publications are included in Appendix D.

come together and share information with other wildland fire professionals (US Forest Service, 2013). *International Journal of Wildland Fire* (IJWF) is published by CSIRO Publishing on the behalf of International Association of Wildland Fire. IJWF is published eight times a year, which is available on-line and print to subscribers. This journal focuses on papers that enhance basic and applied research regarding wildland fire (CSIRO Publishing, 2013).

Usefulness

Usefulness of the publications was based on five criteria: if respondents learn anything new from the publication, if information from publication enhances their understanding of fire ecology and/or fire management, if information in the publication is relevant to their job, do they use the information in day-to-day management decisions, and how often respondents pass information from the publication on to others.

The vast majority of respondents indicated that they sometimes or always learned something new about fire ecology and/or fire management. The *Synthesis of Knowledge, Fire Ecology*, and *IJWF* had the highest percentage that stated they always learned something new (Figure 2). These publications contain recent research on fire management and fire ecology.

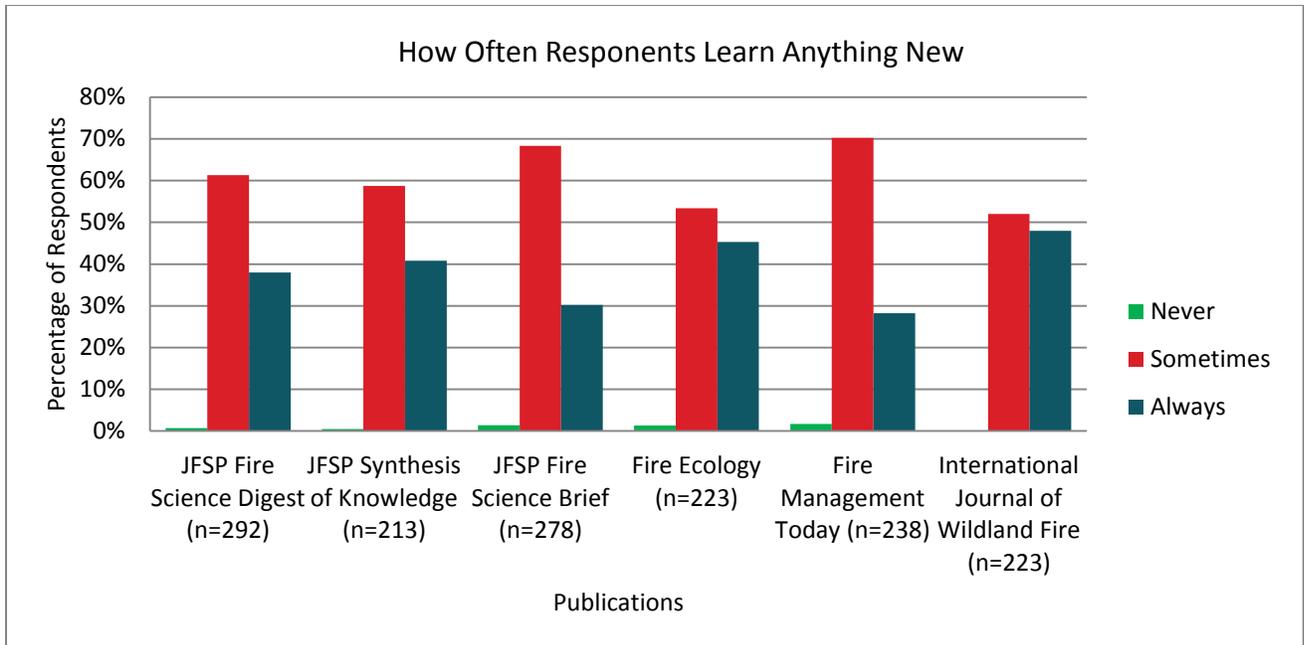


Figure 2. How often respondents learn anything new from JFSP publications, *Fire Ecology*, *Fire Management Today* and *International Journal of Wildland Fire* (n only includes those that read the publications).

Ninety-seven to ninety-nine percent of respondents stated that information in all of the publications either sometimes or always enhance their understanding of fire ecology and /or fire management. *Fire Ecology* followed by *IJWF* and *Synthesis of Knowledge* has the largest percentage of respondents who said that the publication always enhances their understanding of fire management or fire ecology (Figure 3). The publications differ in depth and scope. *Fire Ecology* and *IJWF* are peer-reviewed journals that include articles on multiple topics whereas the *Synthesis of Knowledge* focuses on a single topic and presents a synthesis of multiple research projects. For example, a general topic for *Synthesis of Knowledge* was extreme fire behavior and each chapter focused on a different aspect of extreme fire behavior.

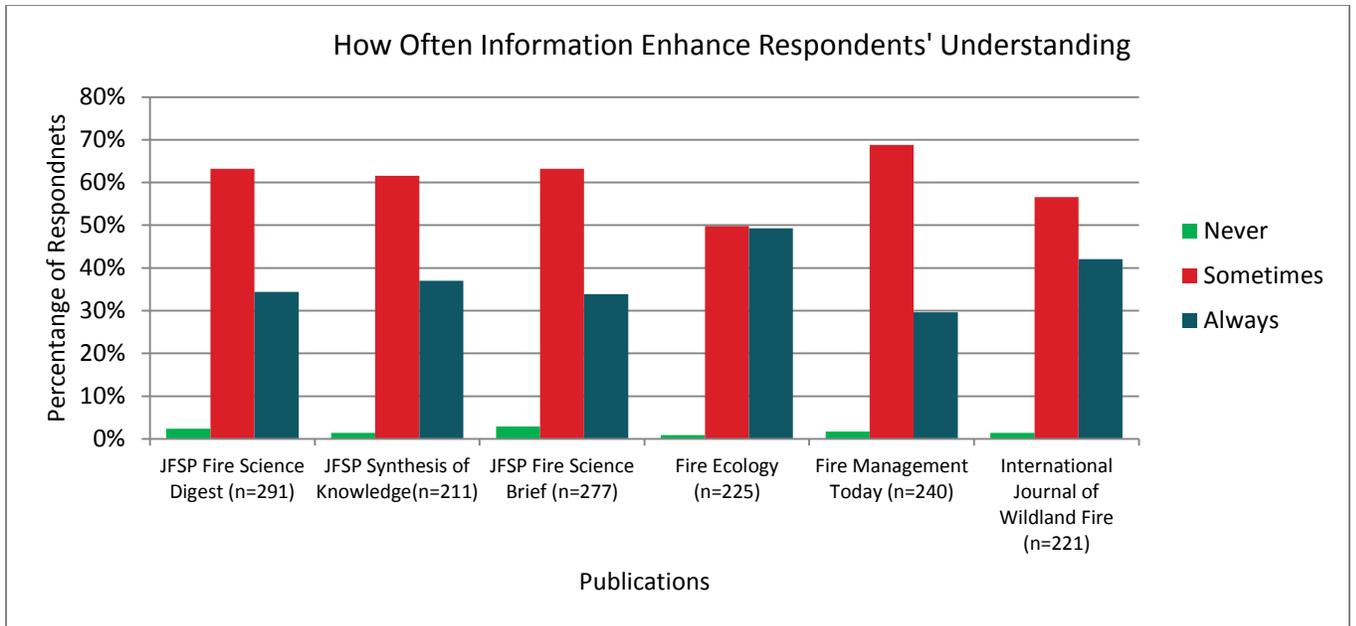


Figure 3. How often publications enhance respondents' understanding of fire ecology and/or fire management (n only includes those that read the publications).

Ninety-eight to ninety-nine percent of respondents state that information from the publications is sometimes or always directly relevant to their jobs. Of JFSP publications *Fire Science Digest* has highest percentage of respondents, at 23% that say the information is always directly relevant. This could be because the *Fire Science Digest* is the most read JFSP publication. *Fire Ecology* has the highest percentage of respondents among *Fire Management Today* and *IJWF* that say information is always directly relevant (Figure 4).

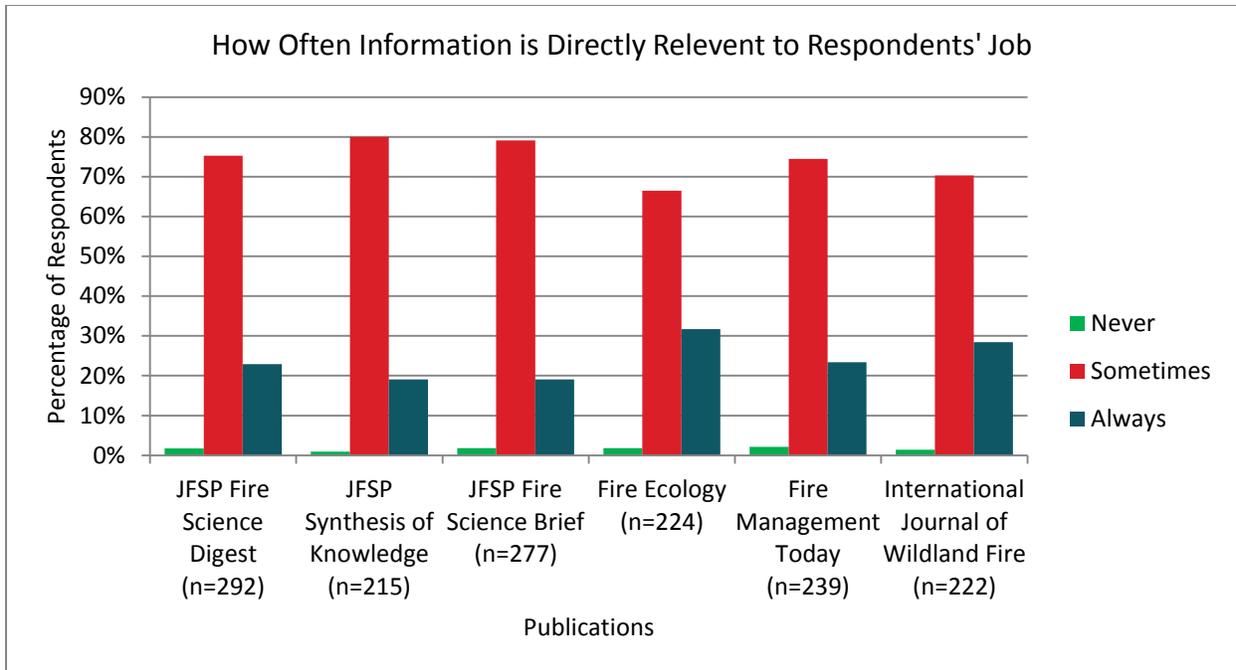


Figure 4. How often information in JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire* directly relevant to respondents' job (n only includes those that read the publications).

Information found in JFSP publications is used by about eighty percent of the respondents in their day to day management decisions. Approximately eighty-nine percent of respondents use information from *Fire Ecology* and *IJWF* in their day-to-day management decisions. However, Eleven to eighteen percent never use information from these publications in their daily management decisions (Figure 5). Studies have found that lack of resources, lack of time, conflicting agency policies, litigation concerns, and public perception of management decisions are some of the barriers to the use of research (Ryan & Cerveny 2011, Wright 2010).

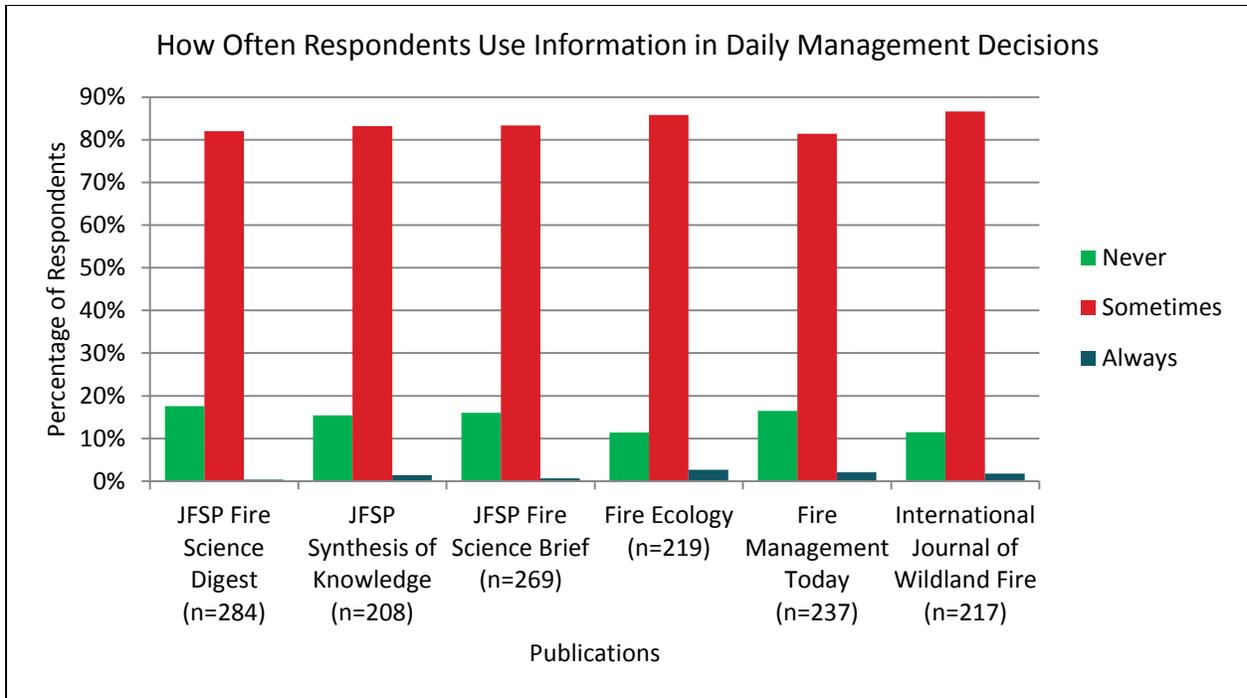


Figure 5. How often respondents use information from JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire* in their day-to-day management decisions (n only includes those that read the publications).

About ninety-two percent of respondents sometimes or always pass information from the JFSP publications, *Fire Ecology* and *IJWF* along to others. Only eighty-three percent of respondents sometimes or always pass information on from *Fire Management Today*. *Fire Management Today* has the highest percent who say they never pass information on to others (Figure 6).

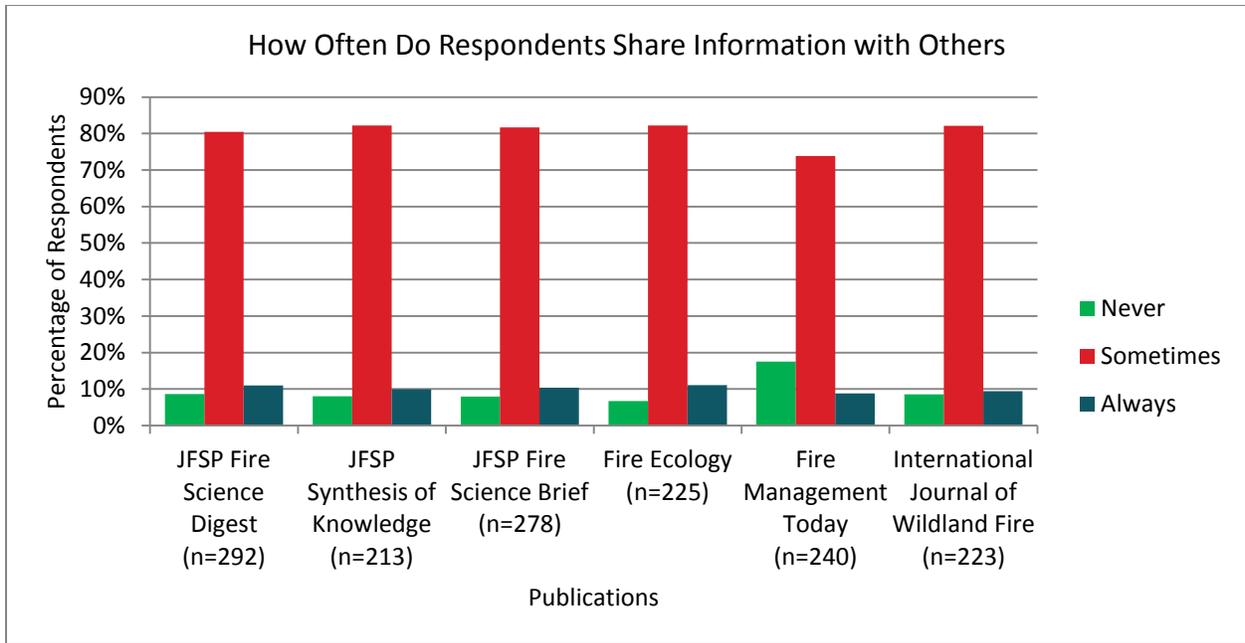


Figure 6. How often respondents pass information on from JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire* along to others (n only includes those that read the publications).

Understandability

Understandability is based on two factors. First, how respondents feel about how the information is presented. Second, if the key findings and implications are clearly stated. All three JFSP publications have eighty percent of respondents who say the information is presented about right. *Synthesis of Knowledge* was the most technical of the JFSP publication because it is written by researchers versus science writers. *Fire Ecology* and *IJWF* are the most technical of all the publications (Figure 7). Both *Fire Ecology* and *IJWF* are peer reviewed journals.

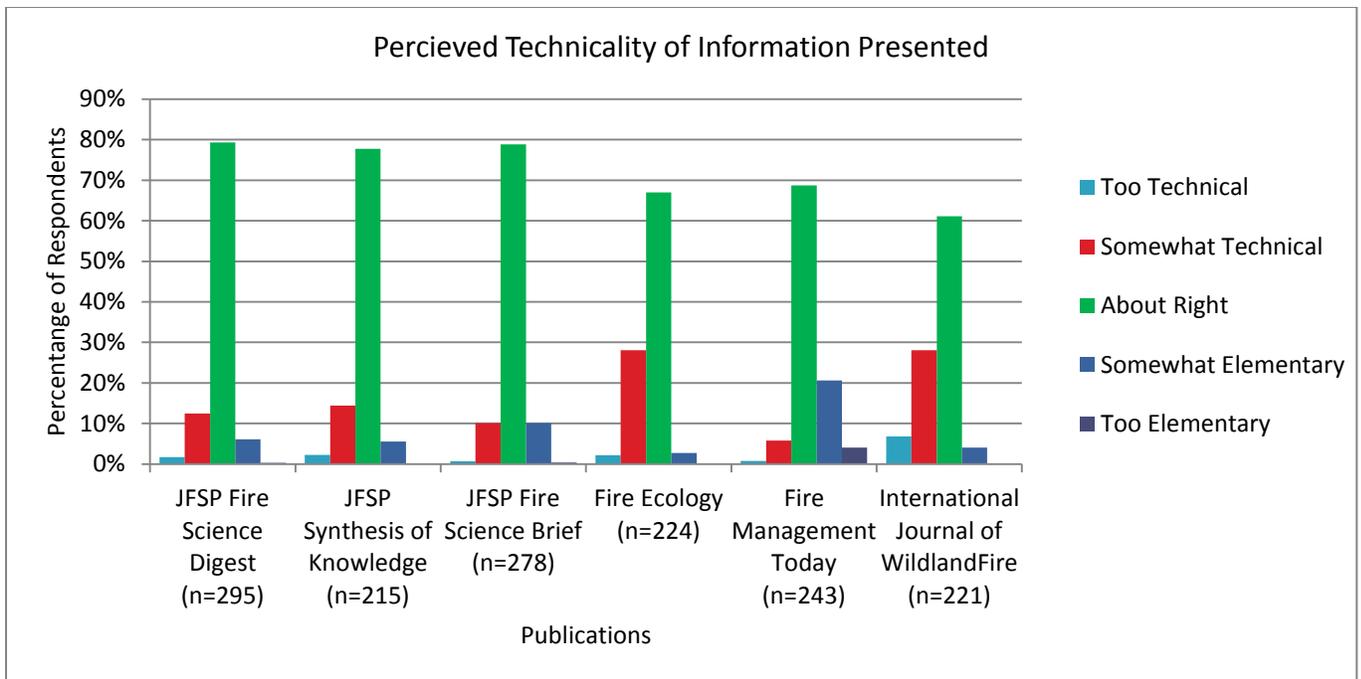


Figure 7. How respondents feel about the way information is presented in JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire* (n only includes those that read the publications).

Whether key findings and implications are clearly stated was only asked about *Fire Science Digest*, *Synthesis of Knowledge*, and *Fire Science Brief*. Respondents feel that key findings and implications are clearly stated for all of the JFSP publications. *Fire Science Brief* has the highest percentage of respondents that said key findings and implications are always clearly stated (Figure 8). This could be because *Fire Science Brief* has boxes that highlight key findings and implications.

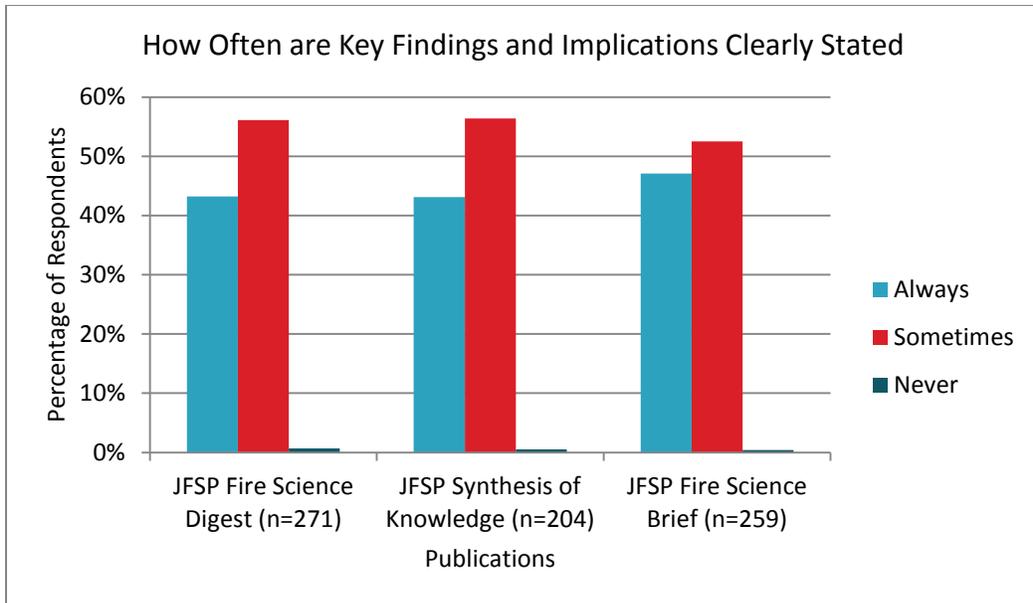


Figure 8. How often key findings and implications clearly stated in *Fire Science Digest*, *Synthesis of Knowledge* and *Fire Science Brief* (n only includes those that read the publications).

Accessibility

Accessibility is based on the perceived ease of obtaining a copy of the publication. The JFSP publications are the easiest publications to obtain a copy of. Respondents feel that *Fire Science Digest* is the easiest of all of publications to get. It is available both online and in print. *Synthesis of Knowledge* is the hardest of the JFSP publications to obtain a copy of because it is only available online. The *International Journal of Wildland Fire* is the hardest of all the publications to obtain (Figure 9) because one needs a subscription to access it online and to receive a print copy.

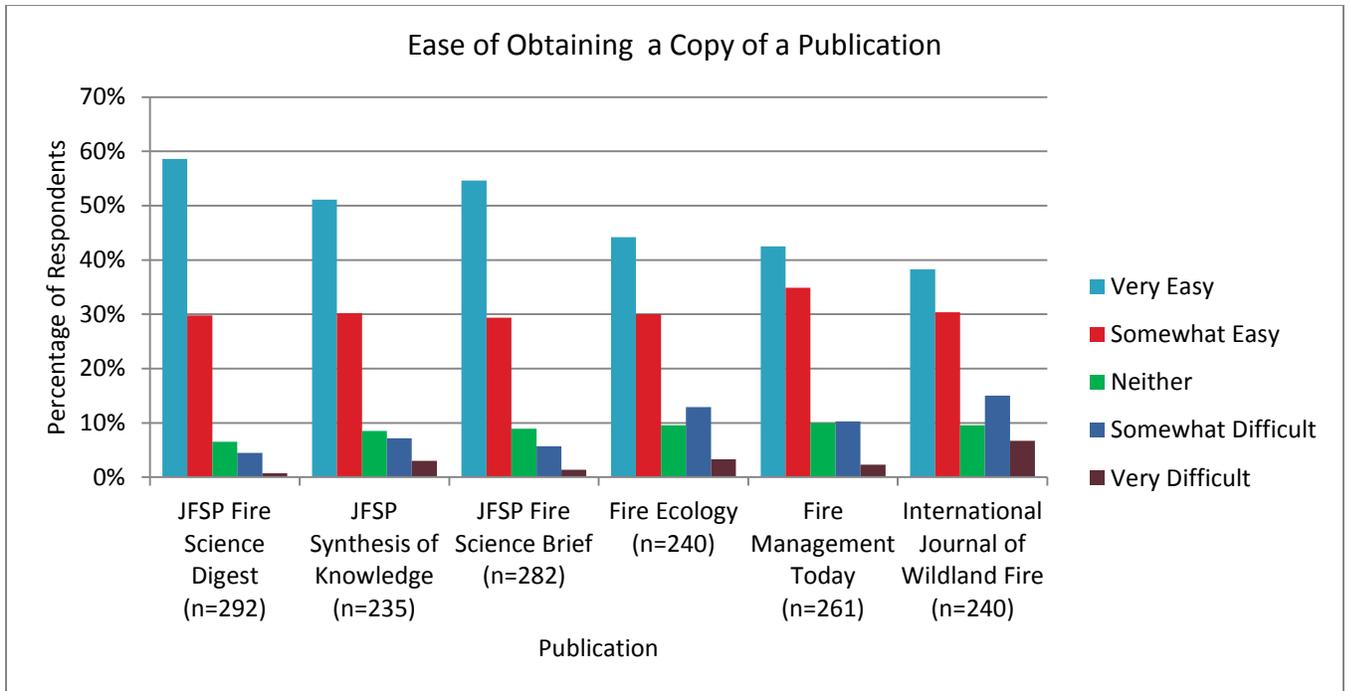


Figure 9. Respondents perceived ease of obtaining a copy of JFSP publications, *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire* (n only includes those that read the publication).

The following two figures focus on the accessibility and preference for availability of *Fire*

Science Digest, the only JFSP publication that is currently available in print (as well as on-line).

Sixty-three percent of respondents currently obtain a copy of *Fire Science Digest* online only

(Figure 10). Sixty percent of respondents said they would prefer to obtain a copy of *Fire Science*

Digest only online while 30 percent would prefer to get a copy online and in print (Figure 11).

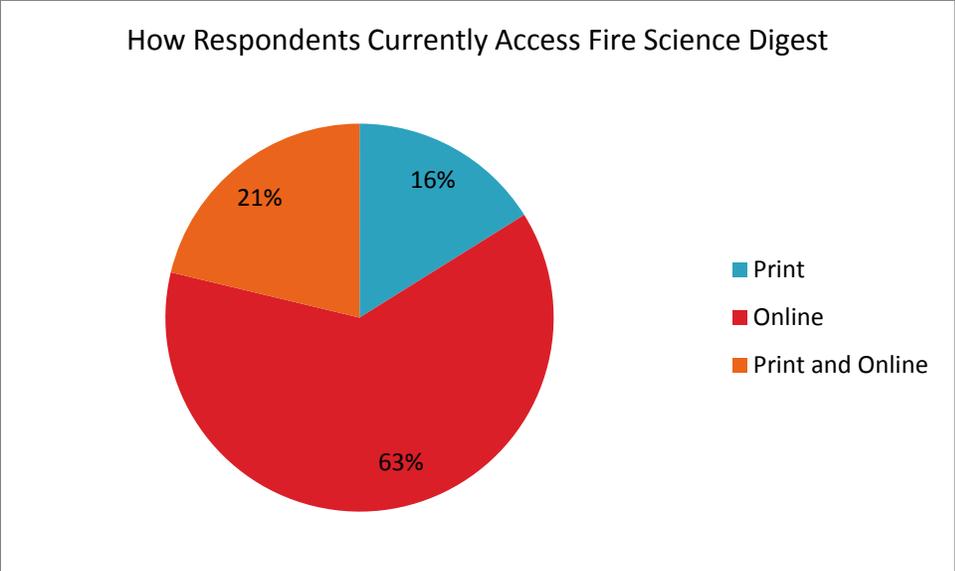


Figure 10. How respondents currently access *Fire Science Digest* (n=273, n only includes those that read *Fire Science Digest*).

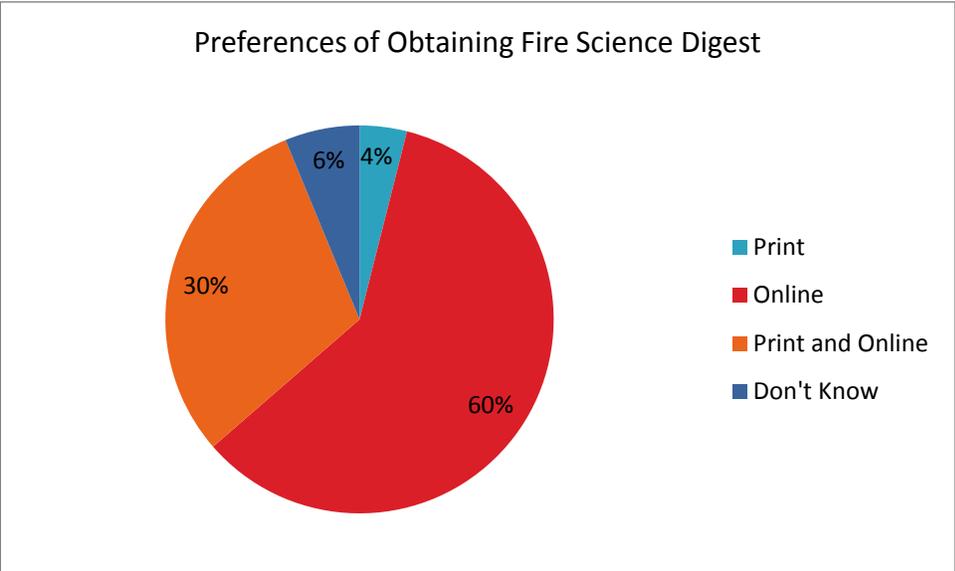


Figure 11. Respondents' preference for how *Fire Science Digest* be made available (n=305).

Conclusions/Recommendations

Respondents found that the information in the Joint Fire Science Program publications to be useful, relevant, accessible and understandable. They are comparable to *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire (IJWF)* in that they are a trusted source of information, useful, and relevant. The JFSP publications are more easily accessible and understandable than *Fire Ecology* and *IJWF*.

Fire Science Digest and *Fire Science Brief* are easy for respondents to access or obtain a copy. *Synthesis of Knowledge* was perceived to be a little difficult to obtain a copy because it is published periodically. *IJWF* is considered to be the hardest of the publications to get because one needs to have subscription to access it online or get it mailed.

Respondents prefer printable pdf, print and video formats for receiving information about fire ecology and/or fire management. The most preferred delivery methods are email, via the JFSP website and print. This could be because the younger respondents maybe more accepting and already utilize new technology. Interestingly, the most preferred delivery method is email but only twenty-eight percent of respondents subscribe to *eNews*.

There was not an overwhelming “yes” to the question as to whether the *Fire Science Brief* should be published again. Eighteen percent of respondents said no and another 42 percent did not know. Some respondents did not realize that *Fire Science Brief* was discontinued.

The *Fire Science Digest* should be published on a quarterly basis because most respondents stated they read publications quarterly. Respondents tend to scan publications

and look for specific topics and information. Due to this tendency key findings and implications should be clearly stated and highlighted in boxes like in *Fire Science Brief*.

The national JFSP and the Knowledge Exchange Consortia could collaborate in the advertising and delivery of new publications and information. Each of the consortia utilizes different delivery methods. Only twenty-eight percent of respondents subscribe to *eNews*, which notifies subscribers of new information and publications. By utilizing the consortia a broader audience could be reached.

Some respondents indicated that they would like the opportunity to ask scientists questions whose research the publication is based on. This could be done through a webinar with the scientists. An example of this is the Rocky Mountain Research Station with their publication *Science You Can Use Bulletin*. Another survey should be done in five to ten years to see if and preferences for delivery methods change. The JFSP should continue to monitor fire professionals' perceptions of usefulness, relevance and accessibility of JFSP publications. As the demographics change and new technology is developed preferences will change.

Respondents found the information presented in JFSP publications to be trustworthy, useful, relevant, and accessibility. The dissemination of information needs to be tailored to meet respondents' needs and preferences.

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Appendix A

Comparison of format and delivery channels among the JFSP consortia

Comparison of information delivery channels used by federal land management agencies

Comparison of delivery methods, format, issues per year and number of topics covered among JFSP publications, research publications published by the US Forest Service Research Stations, National Park Service, BIA/NIFC, and *Fire Ecology*, *Fire Management Today*, and *International Journal of Wildland Fire*

Table 14. A comparison of formats and delivery channels used by the Joint Fire Science Program Knowledge Exchange Consortia.

| Consortium | Newsletter | Research Briefs | Fact Sheets | Webinars | Podcasts | Email | Twitter | Linkedin | Facebook | Blog | YouTube | Vimeo | Scribd |
|------------------|------------|-----------------|-------------|----------|----------|-------|---------|----------|----------|------|---------|-------|--------|
| Alaska | Monthly | X | X | | | X | X | | X | X | | | |
| Appalachians | Quarterly | | | | | X | X | | X | | | | |
| California | Monthly | | | X | | X | X | | | X | | | |
| Great Basin | Monthly | | | X | | X | X | | X | | X | | |
| Great Plains | Monthly | X | | | | X | X | | X | X | X | | |
| Lake States | Monthly | | | X | | X | X | | | | | | |
| Oak Woodlands | Quarterly | | | X | | X | X | | X | X | | X | |
| Northern Rockies | Quarterly | | | X | X | X | X | | | | | | |
| Northwest | Weekly | X | | X | | X | X | | X | | | | |
| Pacific | Quarterly | | | X | | X | X | | | | | | |
| South | Bi-Monthly | X | X | X | | X | X | X | X | | X | | X |
| Southern Rockies | Bi-Weekly | | | X | | X | X | | | | | | X |
| Southwest | Quarterly | | | X | | X | X | | | | | | |
| Tallgrass | Monthly | | | X | | X | X | | X | | | X | |

Table 15. A comparison of information delivery channels used by the National Park Service, Bureau of Land Management, U.S. Forest Service, and U.S. Fish and Wildlife Service.

| Agency | Website | Email | Print | Facebook | Twitter | Blog | You Tube | iTunes | tumblr | Flickr |
|--------------------------------|---------|-------|-------|----------|---------|------|----------|--------|--------|--------|
| National Park Service | X | X | X | X | X | | X | X | | |
| Bureau of Land Management | X | | | X | X | | X | | X | |
| U.S. Forest Service | X | X | | X | X | X | X | | | |
| U.S. Fish and Wildlife Service | X | | | | X | X | X | | | X |

Table 16. Comparison among JFSP publications, US Forest Service Research Stations publications, National Park Service, BIA/NIFC, Fire Ecology, Fire Management Today, and International Journal of Wildland Fire on delivery methods, format, issues per year and number of topics covered.

| | Number of issues per year | Medium/Delivery | | | | | Scientific Format | News Article Format | Highlights Key Findings | Highlights Implications | Summary on first page | Number of Topics covered per issue |
|---|---------------------------|-----------------|-------|--------|-------|---------|-------------------|---------------------|-------------------------|-------------------------|-----------------------|------------------------------------|
| | | Internet | Print | E-Pubs | Email | Twitter | | | | | | |
| <i>JFSP Fire Science Digest</i> | Several | x | x | x | | | x | | | x | 1 | |
| <i>JFSP Fire Science Brief</i> | Discontinued | x | | x | | | x | x | x | x | 1 | |
| <i>JFSP eNews</i> | Biweekly | x | | | x | x | | x | | x | 1 | |
| <i>JFSP Synthesis of Knowledge</i> | When one is done | x | | x | | | x | | x | | 1 | |
| <i>PNW Science Findings</i> | Monthly | x | x | x | | | x | x | x | x | 1 | |
| <i>SRS CompassLive</i> | Updated regularly | x | | | x | x | x | | | | Few | |
| <i>RMRS Science You Can Use Bulletin</i> | Bi-monthly | x | | | | | x | x | x | x | 1 | |
| <i>BIA/NIFC Smoke Signals</i> | Quarterly | x | x | | | | x | | | | Several | |
| <i>NPS Park Science</i> | Three | x | x | | x | | x | x | | | Few | |
| <i>International Journal of Wildland Fire</i> | Eight | x | x | | | | x | | x | | Several | |
| <i>Fire Ecology</i> | Three | x | | | | | x | | x | | Several | |
| <i>Fire Management Today</i> | Four | x | x | | | | x | | | | Few | |

Appendix B

JFSP Publications Profiles

Fire Science Digest

55.2% out of 795 respondents read the Digest

For about how many years have you been reading Fire Science Digest? (n = 468)

- 8.1% less than a year
- 30.1% 1-2 years
- 26.7% 3-4 years
- 22.9% 5 or more years
- 12.2% do not read it

How often do you read the Fire Science Digest? (n = 468)

- No one reads it daily
- 1.3% Digest weekly
- 24.1% monthly
- 50.2% quarterly
- 12% yearly
- 12.4% do not read it

Responses to the following questions include only those who read Fire Science Digest.

How do you typically read the Fire Science Digest? (n = 413)

- 11.1% read it cover to cover
- 36.1% scan it
- 52.8% look for specific topics and information

How much do you trust the Fire Science Digest to provide quality research findings and information? (n = 309)

- 52.8% totally trust it
- 38.5% somewhat trust it
- 6.5% neither
- 1.3% somewhat mistrust it
- 1% totally mistrust it

Do you find the information presented in the Fire Science Digest to be biased? (n = 290)

- 49.7% never
- 49% sometimes
- 1.4% always

Do you learn anything new from the Digest? (n = 292)

- 0.7% never
- 61.3% sometimes
- 38% always

Does the Fire Science Digest enhance your understanding of fire ecology and/or fire management? (n = 291)

- 2.4% never
- 63.2% sometimes
- 34.4% always

Is the information directly relevant to your job? (n = 292)

- 1.7% never
- 75.3% sometimes
- 22.9% always

How often do you use the information from Fire Science Digest in your day-to-day management decisions? (n = 284)

- 17.7% never
- 82% sometimes
- 0.4% always

How often do you pass information on from Fire Science Digest along to others? (n = 292)

- 8.6% never
- 80.5% sometimes
- 11% always
-

How do you feel about the way information is presented in Fire Science Digest? (n = 295)

- 1.7% too technical
- 12.5% somewhat technical
- 79.3% about right
- 6.1% somewhat elementary
- 0.3% too elementary

How easy is it for you to obtain a copy of Fire Science Digest? (n = 292)

- 58.6% very easy
- 29.8% somewhat easy
- 6.5% neither
- 4.5% somewhat difficult
- 0.7% very difficult

Are key findings and implications clearly stated? (n = 271)

- 43.2% always
- 56.1% sometimes
- 0.7% never

How do you currently access Fire Science Digest? (n = 273)

- 16.1% Print
- 62.6% Online
- 21.2% Print and Online

How would you prefer Fire Science Digest be made available? (n = 286)

- 4.2% Print
- 63.6% Online
- 32.2% Print and Online

What is one thing that appeals to you about Fire Science Digest? (Top five responses, n = 274)

- It provides a quick, short overview
- It is a quick read
- Topics and information
- Brief/short
- It is an easy read

What is one thing you would change about Fire Science Digest? (Top five responses, n = 281)

- Accessibility
 - Website navigation needs to be better
- Key findings and implications are clearly stated in the front
- Publish more of them
- Distribution to the field
- Remove bias

Respondents' job type, who read Fire Science Digest. n = 494

- 2.2% Field Technician
- 4.9% Fuels Planner/Fuel Manager
- 5.9% Fire Ecologist
- 7.7% Fire Manager
- 5.3% Staff & Line Officer/Decision-Maker
- 13.6% Researcher
- 12.3% Other

Synthesis of Knowledge

34.8% individuals out 795 read the Synthesis of Knowledge

For about how many years have you been reading the Synthesis of Knowledge? (n = 420)

- 9.5% less than year
- 25.7% 1 to 2 years
- 19.5% 3 to 4 years
- 13.8% 5 years or more
- 31.4% do not read it

How often do you read the Synthesis of Knowledge? (n = 425)

- 0.2% daily
- 0.7% weekly
- 10.8% monthly
- 35.5% quarterly
- 20.3% yearly
- 32.5% do not read it

Responses to the following questions include only those who read Synthesis of Knowledge.

How do you typically read Synthesis of Knowledge? (n = 294)

- 9.2% read it cover to cover
- 31.6% scan it
- 59.2% look for specific topics and information

How much do you trust the Synthesis of Knowledge to provide quality research findings and information? (n = 229)

- 53.7% totally trust it
- 34.9% somewhat trust it
- 8.7% neither
- 1.3% somewhat mistrust it
- 1.3% totally mistrust it

Do you find the information presented in the Synthesis of Knowledge to be biased? (n = 212)

- 52.4% never
- 46.7% sometimes
- 0.9% biased

Do you learn anything new from the Synthesis of Knowledge? (n = 213)

- 0.5% never
- 58.7% sometimes
- 40.8% always

Does the Synthesis of Knowledge enhance your understanding of fire ecology and/or fire management? (n = 211)

- 1.4% never
- 61.6% sometimes
- 37% always

Is the information directly relevant to your job? (n = 215)

- 0.9% never
- 80% sometimes
- 19.1% always

How often do you use information from the Synthesis of Knowledge in your day-to-day management decisions? (n = 208)

- 15.4% never
- 83.2% sometimes
- 1.4% always

How often do you pass information from the Synthesis of Knowledge along to others? (n = 213)

- 8% never
- 82.2% sometimes
- 9.9% always

How do you feel about the way the information is presented in the Synthesis of Knowledge? (n = 215)

- 2.3% too technical
- 14.4% somewhat technical
- 77.7% about right
- 5.6% somewhat elementary
- 0% too elementary

How easy is it for you to obtain or access a copy of the Synthesis of Knowledge? (n = 235)

- 51.1% very easy
- 30.2% somewhat easy
- 8.5% neither
- 7.2% somewhat difficult
- 3% very difficult

Are key findings and implications clearly stated? (n = 204)

- 43.1% always
- 56.4% sometimes
- 0.5% never

What is one thing that appeals to you about the Synthesis of Knowledge? (Top five responses, n = 239)

- Brings together a lot of information/resources into one place
- Comprehensive/In-depth
- Has good information
- Current research and information
- Relevant information

What is one thing that you would change about the Synthesis of Knowledge? (Top five responses, n = 267)

- Accessibility, make it easier to find
- Include a short summary, key findings and implications on first page
- More variety of topics, broaden scope
- More of them
- Delivery methods
- Remember who the audience is, keep it non-technical

Respondents' job type, who read Synthesis of Knowledge. n = 494

- 1.0% Field Technician
- 2.2% Fuels Planner/Fuel Manager
- 4.9% Fire Ecologist
- 3.8% Fire Manager
- 2.8% Staff & Line Officer/Decision-Maker
- 10.1% Researcher
- 8.1% Other

Fire Science Brief

51.9% of respondents out 795 read the Fire Science Brief

For about how many years have you been reading the Fire Science Brief? (n = 453)

- 8.8% less than a year
- 32% 1 to 2 years
- 24.7% 3 to 4 years
- 19.6% 5 or more years
- 14.8% do not read it

How often do you read the Fire Science Brief? (n = 452)

- No one reads it daily
- 1.8% weekly
- 21.7% monthly
- 48% quarterly
- 13.7% yearly
- 14.8% do not read it

Responses to the following questions include only those who read Fire Science Brief.

How do you typically read Fire Science Brief? (n = 375)

- 14.1% read it cover to cover
- 36% scan it
- 49.9% look for specific topics and information

How much do you trust the Fire Science Brief to provide quality research findings and information? (n = 296)

- 52.4% totally trust it
- 38.2% somewhat trust it
- 7.1% neither
- 1.7% somewhat mistrust it
- 0.7% totally mistrust it

Do you find the information presented in the Fire Science Brief to be biased? (n = 277)

- 49.5% never
- 48.7% sometimes
- 1.8% always

Do you learn anything new from Fire Science Brief? (n = 278)

- 1.4% never
- 68.3% sometimes
- 30.2% always

Does the Fire Science Brief enhance your understanding of fire ecology and/or fire management? (n = 277)

- 2.9% never
- 63.2% sometimes
- 33.9% always

Is the information directly relevant to your job? (n = 277)

- 1.8% never
- 79.1% sometimes
- 19.1% always

How often do use information from Fire Science Brief in your day-to-day management decisions? (n = 269)

- 16% never
- 83.3% sometimes
- 0.7% always

How often do you pass information from the Fire Science Brief along to others? (n = 278)

- 7.9% never
- 81.7% sometimes
- 10.4% always

How do you feel about the way the information is presented in the Fire Science Brief? (n = 278)

- 0.7% too technical
- 10.1% somewhat technical
- 78.8% about right
- 10.1% somewhat elementary
- 0.4% too elementary

How easy is it for you to obtain or access a copy of Fire Science Brief? (n = 282)

- 54.6% very easy
- 29.4% somewhat easy
- 8.9% neither
- 5.7% somewhat difficult
- 1.4% very difficult

Are key findings and implications clearly stated? (n = 259)

- 47.1% always
- 52.5% sometimes
- 0.4% never

The Joint Fire Science Program has discontinued publication of the Fire Science Brief. Would you like the Joint Fire Science Program to publish Fire Science Brief again? (n = 305)

- 40.0% yes
- 18.0% no
- 42.0% don't know

What is one thing that appeals to you about Fire Science Brief? (Top five responses, n = 256)

- Short/Brief
- Quick Read
- Updates on current projects/research
- Topics and Information
- Easy Read

What is one thing that you would change about Fire Science Brief? (Top five responses, n = 269)

- Easier to find and access
- Dissemination
- Print more of them
- Try to remove bias
- Provide links to full articles and other information

Respondents' job type, who read Fire Science Brief. n = 494

- 1.2% Field Technician
- 4.0% Fuels Planner/Fuel Manager
- 6.1% Fire Ecologist
- 7.3% Fire Manager
- 4.9% Staff & Line Officer/Decision-Maker
- 14.2% Researcher
- 11.1% Other

Appendix C

Survey

We are conducting a survey for the Joint Fire Science Program (JFSP). The purpose of the survey is to evaluate publications produced by the Joint Fire Science Program to determine if they are meeting the current needs of their readers. Results of the survey will be helpful in the future design, topics and delivery of these publications.

The survey will take approximately 15 minutes. Your participation in the survey is strictly voluntary and you may withdraw from the survey at any time. Please read and answer the questions carefully and to the best of your ability.

If you have any questions, please contact Marty Lee, Principal Investigator on the project at martha.lee@nau.edu.

These first questions ask about your awareness of the Joint Fire Science Program and the publications it produces.

1. Are you aware of the Joint Fire Science Program?

Yes

No

2. Do you consider the Joint Fire Science Program to be a trusted provider of information?

Yes

No

Don't Know

3. The Joint Fire Science Program (JFSP) produces a number of publications. Which of the following JFSP publications have you read? (check all that apply)

Fire Science Digest

Fire Science Brief

Synthesis of Knowledge

None of them

These next questions ask about your general reading of JFSP publications as well as three other fire-related publications. We recognize that your reading of these publications may depend on a particular topic or issue. Please answer these questions in terms of your typical reading of each publication.

4. For about how many years have you been reading each of the publications? (select one response for each publication)

| | Less than a year | 1-2 years | 3-4 years | 5 or more years | Not at all |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> |
| Fire Management Today | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> |

5. How often do you read each of the publications? (select one response for each publication)

| | Daily | Weekly | Monthly | Quarterly | Yearly | Not at all |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> |
| Fire Management | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> |

6. How do you typically read the following? (select one response for each publication)

| | Cover to Cover | Scan it | Look for Specific Topics and Information | Not at all |
|--|-----------------------|-----------------------|--|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fire Management Today | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

These next questions ask about your trust of the information found in these publications and how you use that information.

7. How much do you trust each of the publications to provide quality research findings and information? (check one response for each publication)

| | I totally trust it | I somewhat trust it | Neither | I somewhat mistrust it | I totally mistrust it | I don't read it |
|--|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fire Management Today | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Please explain why. Indicate which publication(s) you are referring to:

8. This question asks about the usefulness of the material found in the publications. We realize your answers may depend on the content or topics so please answer from a general perspective.

| | JFSP Fire Science Digest | JFSP Synthesis of Knowledge | JFSP Fire Science Brief | Fire Ecology | Fire Management Today | International Journal of Wildland Fire |
|--|-----------------------------|--------------------------------|----------------------------|-----------------------|--------------------------|--|
| Do you find the information presented in this publication to be biased? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Do you learn anything new from this publication? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Does the publication enhance your understanding of fire ecology and/or fire management? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Is the information directly relevant to your job? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you use information from this publication in your day-to-day management decisions? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| How often do you pass information from this publication along to others? (check one response for each publication) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. How do you feel about the way the information is presented in each of the following publications? Is it... (check one response for each publication)

| | Too technical | Somewhat technical | About right | Somewhat elementary | Too elementary | I don't read it |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> |
| Fire Management Today | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> |

10. How easy is it for you to obtain or access a copy of each of the following publications? (check one response for each publication)

| | Very easy | Somewhat easy | Neither | Somewhat difficult | Very difficult | I don't read it |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| JFSP Fire Science Digest | <input type="radio"/> |
| JFSP Synthesis of Knowledge | <input type="radio"/> |
| JFSP Fire Science Brief | <input type="radio"/> |
| Fire Ecology | <input type="radio"/> |
| Fire Management Today | <input type="radio"/> |
| International Journal of Wildland Fire | <input type="radio"/> |

11. What is the one thing that appeals to you about each of the following publications?

JFSP Fire Science Digest

JFSP Synthesis of Knowledge

JFSP Fire Science Brief

Fire Ecology

Fire Management Today

International Journal of Wildland Fire

These next questions ask only about JFSP publications -- their format and topics you might like to see in these publications.

12. Are key findings and implications clearly stated? (select one response for each publication)

| | Always | Sometimes | Never | I don't read it |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Fire Science Digest | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Syntheses of Knowledge | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Fire Science Brief | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

13. What is one thing that you would change about the each of the following JFSP publications?

Fire Science Digest

Synthesis of Knowledge

Fire Science Brief

14. How do you currently access Fire Science Digest?

- Print
- Online
- Print and Online
- I don't currently read it

15. How would you prefer Fire Science Digest be made available?

- Print
- Online
- Online & Print
- Don't know

16. The Joint Fire Science Program has discontinued publication of the Fire Science Brief. Would you like the Joint Fire Science Program to publish Fire Science Brief again?

- Yes
- No
- Don't know

17. List topics of particular interest to you that you would like to see in JFSP publications?

18. Do you currently receive Firescience.Gov eNews?

- Yes
- No

19. Have you been to the Joint Fire Science Program website (www.firescience.gov)?

- Yes
- No

20. How often do you access the featured publications on the JFSP homepage?

- Regularly
- Sometimes
- Never

21. Of the formats listed below, how would you prefer to get information on fire management and fire ecology? (check all that apply)

- Print
- Printable traditional pdf
- Mobile (smartphone/tablet)
- Podcast
- Videos
- Other (please specify)

22. Of the types of delivery methods listed below, how would you prefer to receive information on fire management and fire ecology? (check all that apply)

- Print
- JFSP Website
- Email
- Scribd
- Twitter
- Facebook
- YouTube
- Vimeo
- iTunes
- Blogs
- Other (please specify)

23. Which of the following publications do you read? (check all that apply)

- USFS Southern Research Station *Compass*
- USFS Pacific Northwest Research Station *Science Findings*
- USFS Rocky Mountain Research Station *Science You Can Use Bulletin*
- BIA/NIFC *Smoke Signals*
- National Park Service *Park Science*
- None of them

These last questions will help us know more about our survey respondents.

24. What is your age? (select one)

- less than 18 years
- 18-29 years
- 30-39 years
- 40-49 years
- 50-59 years
- 60-69 years
- 70 years old or older

25. What is the highest level of education you have completed? (select one)

- Some high school
- High school diploma
- Some college
- 2 year degree
- 4 year degree
- Masters degree
- Doctorate degree

26. Which of the following best describes the type of job you do? (select one)

- Field technician
- Fuels planner
- Fire ecologist
- Fuel manager
- Fire manager
- Staff officer
- Line officer/decision-maker
- Researcher
- Other (please specify)

27. How many years of experience do you have in the field of fire science or as a fire professional? (select one)

- Less than 1 year
- 1-5 years
- 6-10 years
- 11-20 years
- 21 or more years

28. With which JFSP regional consortium are you most closely affiliated? (select one)

- | | |
|---|--|
| <input type="checkbox"/> Alaska | <input type="checkbox"/> Northwest |
| <input type="checkbox"/> Appalachian | <input type="checkbox"/> Pacific |
| <input type="checkbox"/> California | <input type="checkbox"/> Southern |
| <input type="checkbox"/> Great Basin | <input type="checkbox"/> Southern Rockies |
| <input type="checkbox"/> Great Plains | <input type="checkbox"/> Southwest |
| <input type="checkbox"/> Lake States | <input type="checkbox"/> Tallgrass Prairie/Oak Savanna |
| <input type="checkbox"/> Oak Woodlands | <input type="checkbox"/> Not applicable |
| <input type="checkbox"/> Northern Rockies | |

We greatly appreciate your participation in the JFSP Readership Survey. If you have any questions about the survey or would like a copy of the results please contact Marty Lee, Principal Investigator on the project at martha.lee@nau.edu.

Appendix D

Comparison among JFSP publications, *Fire Ecology*, *Fire Management Today*, and *Journal of Wildland Fire*

Table 17. Time respondents have been reading JFSP publications, Fire Ecology, Fire Management Today, and IJWF.

| Publication | N | Less than a year | 1-2 years | 3-4 years | 5 or more years | Not at all |
|--|-----|------------------|-----------|-----------|-----------------|------------|
| JFSP Fire Science Digest | 468 | 8.1% | 30.1% | 26.7% | 22.9% | 12.2% |
| JFSP Synthesis of Knowledge | 420 | 9.5% | 25.7% | 19.5% | 13.8% | 31.4% |
| JFSP Fire Science Brief | 453 | 8.8% | 32.0% | 24.7% | 19.6% | 14.8% |
| Fire Ecology | 426 | 6.6% | 16.4% | 17.8% | 30.8% | 28.4% |
| Fire Management Today | 436 | 5.5% | 11.2% | 12.4% | 43.8% | 27.1% |
| International Journal of Wildland Fire | 420 | 5.0% | 8.6% | 12.4% | 44.0% | 30.0% |

Table 18. How often respondents read JFSP publications, Fire Ecology, Fire Management Today, and IJWF.

| Publication | n | Daily | Weekly | Monthly | Quarterly | Yearly | Not at all |
|--|-----|-------|--------|---------|-----------|--------|------------|
| JFSP Fire Science Digest | 468 | 0.0% | 1.3% | 24.1% | 50.2% | 12.0% | 12.4% |
| JFSP Synthesis of Knowledge | 425 | 0.2% | 0.7% | 10.8% | 35.5% | 20.2% | 32.5% |
| JFSP Fire Science Brief | 452 | 0.0% | 1.8% | 21.7% | 48.0% | 13.7% | 14.8% |
| Fire Ecology | 428 | 0.0% | 3.3% | 15.0% | 37.9% | 14.5% | 29.4% |
| Fire Management Today | 442 | 0.0% | 1.1% | 15.6% | 41.0% | 14.3% | 28.1% |
| International Journal of Wildland Fire | 430 | 0.0% | 2.8% | 21.4% | 28.4% | 16.5% | 30.9% |

Table 19. How respondents typically read JFSP publications, Fire Ecology, Fire Management Today, and IJWF.*

| Publication | n | Cover to Cover | Scan it | Look for Specific Topics and Information |
|--|-----|----------------|---------|--|
| JFSP Fire Science Digest | 413 | 11.1% | 36.1% | 52.8% |
| JFSP Synthesis of Knowledge | 294 | 9.2% | 31.6% | 59.2% |
| JFSP Fire Science Brief | 375 | 14.1% | 36.0% | 49.9% |
| Fire Ecology | 311 | 8.0% | 25.7% | 66.2% |
| Fire Management Today | 322 | 11.8% | 37.0% | 51.2% |
| International Journal of Wildland Fire | 302 | 4.6% | 25.5% | 69.9% |

*n only includes those that read the publications.

Table 20. How much respondents trust JFSP publications, Fire Ecology, Fire Management Today, and International Journal of Wildland Fire to provide quality research findings and information.*

| Publication | n | I totally trust it | I somewhat trust it | Neither | I somewhat mistrust it | I totally mistrust it |
|--|-----|--------------------|---------------------|---------|------------------------|-----------------------|
| JFSP Fire Science Digest | 309 | 52.8% | 38.5% | 6.5% | 1.3% | 1.0% |
| JFSP Synthesis of Knowledge | 229 | 53.7% | 34.9% | 8.7% | 1.3% | 1.3% |
| JFSP Fire Science Brief | 296 | 52.4% | 38.2% | 7.1% | 1.7% | 0.7% |
| Fire Ecology | 238 | 56.7% | 37.0% | 5.0% | 0.4% | 0.8% |
| Fire Management Today | 256 | 38.3% | 49.6% | 10.5% | 1.2% | 0.4% |
| International Journal of Wildland Fire | 237 | 57.0% | 35.0% | 6.3% | 0.8% | 0.8% |

*n only includes those that read the publications.

Table 21. How often respondents find the information presented in JFSP publications and Fire Ecology, Fire Management Today, and International Journal of Wildland Fire to be biased.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 290 | 49.7% | 49.0% | 1.4% |
| JFSP Synthesis of Knowledge | 212 | 52.4% | 46.7% | 0.9% |
| JFSP Fire Science Brief | 277 | 49.5% | 48.7% | 1.8% |
| Fire Ecology | 223 | 51.6% | 47.1% | 1.3% |
| Fire Management Today | 240 | 25.4% | 69.2% | 5.4% |
| International Journal of Wildland Fire | 224 | 50.4% | 48.2% | 1.3% |

*n only includes those that read the publications.

Table 22. How often respondents learn anything new from JFSP publications, Fire Ecology, Fire Management Today, and IJWF.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 292 | 0.7% | 61.3% | 38.0% |
| JFSP Synthesis of Knowledge | 213 | 0.5% | 58.7% | 40.8% |
| JFSP Fire Science Brief | 278 | 1.4% | 68.3% | 30.2% |
| Fire Ecology | 223 | 1.3% | 53.4% | 45.3% |
| Fire Management Today | 238 | 1.7% | 70.2% | 28.2% |
| International Journal of Wildland Fire | 223 | 0.0% | 52.0% | 48.0% |

*n only includes those that read the publications.

Table 23. How often information from JFSP publications, Fire Ecology, Fire Management Today and IJWF enhance respondents' understanding.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 291 | 2.4% | 63.2% | 34.4% |
| JFSP Synthesis of Knowledge | 211 | 1.4% | 61.6% | 37.0% |
| JFSP Fire Science Brief | 277 | 2.9% | 63.2% | 33.9% |
| Fire Ecology | 225 | 0.9% | 49.8% | 49.3% |
| Fire Management Today | 240 | 1.7% | 68.8% | 29.6% |
| International Journal of Wildland Fire | 221 | 1.4% | 56.6% | 42.1% |

*n only includes those that read the publications.

Table 24. Information from JFSJP publications, Fire Ecology, Fire Management Today, and IJWF directly relevant to respondents' job.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 292 | 1.7% | 75.3% | 22.9% |
| JFSP Synthesis of Knowledge | 215 | 0.9% | 80.0% | 19.1% |
| JFSP Fire Science Brief | 277 | 1.8% | 79.1% | 19.1% |
| Fire Ecology | 224 | 1.8% | 66.5% | 31.7% |
| Fire Management Today | 239 | 2.1% | 74.5% | 23.4% |
| International Journal of Wildland Fire | 222 | 1.4% | 70.3% | 28.4% |

*n only includes those that read the publications.

Table 25. How often respondents use information from JFSP Publications, Fire Ecology, Fire Management Today, and IJWF in their day-to-day management decisions.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 284 | 17.6% | 82.0% | 0.4% |
| JFSP Synthesis of Knowledge | 208 | 15.4% | 83.2% | 1.4% |
| JFSP Fire Science Brief | 269 | 16.0% | 83.3% | 0.7% |
| Fire Ecology | 219 | 11.4% | 85.8% | 2.7% |
| Fire Management Today | 237 | 16.5% | 81.4% | 2.1% |
| International Journal of Wildland Fire | 217 | 11.5% | 86.6% | 1.8% |

*n only includes those that read the publications.

Table 26. How often respondents share information from JFSP publications, Fire Ecology, Fire Management Today, and IJWF with others.*

| Publication | n | Never | Sometimes | Always |
|--|-----|-------|-----------|--------|
| JFSP Fire Science Digest | 292 | 8.6% | 80.5% | 11.0% |
| JFSP Synthesis of Knowledge | 213 | 8.0% | 82.2% | 9.9% |
| JFSP Fire Science Brief | 278 | 7.9% | 81.7% | 10.4% |
| Fire Ecology | 225 | 6.7% | 82.2% | 11.1% |
| Fire Management Today | 240 | 17.5% | 73.8% | 8.8% |
| International Journal of Wildland Fire | 223 | 8.5% | 82.1% | 9.4% |

*n only includes those that read the publications.

Table 27. How respondents feel about the way information is presented in JFSP publications, Fire Ecology, Fire Management Today, and IJWF.*

| Publication | n | Too Technical | Somewhat Technical | About Right | Somewhat Elementary | Too Elementary |
|--|-----|---------------|--------------------|-------------|---------------------|----------------|
| JFSP Fire Science Digest | 295 | 1.7% | 12.5% | 79.3% | 6.1% | 0.3% |
| JFSP Synthesis of Knowledge | 215 | 2.3% | 14.4% | 77.7% | 5.6% | 0.0% |
| JFSP Fire Science Brief | 278 | 0.7% | 10.1% | 78.8% | 10.1% | 0.4% |
| Fire Ecology | 224 | 2.2% | 28.1% | 67.0% | 2.7% | 0.0% |
| Fire Management Today | 243 | 0.8% | 5.8% | 68.7% | 20.6% | 4.1% |
| International Journal of Wildland Fire | 221 | 6.8% | 28.1% | 61.1% | 4.1% | 0.0% |

*n only includes those that read the publications.

Table 28. Respondents ease of access or obtaining a copy of JFSP publications, Fire Ecology, Fire Management Today, and IJWF.*

| Publication | n | Very Easy | Somewhat Easy | Neither | Somewhat Difficult | Very Difficult |
|--|-----|-----------|---------------|---------|--------------------|----------------|
| JFSP Fire Science Digest | 292 | 58.6% | 29.8% | 6.5% | 4.5% | 0.7% |
| JFSP Synthesis of Knowledge | 235 | 51.1% | 30.2% | 8.5% | 7.2% | 3.0% |
| JFSP Fire Science Brief | 282 | 54.6% | 29.4% | 8.9% | 5.7% | 1.4% |
| Fire Ecology | 240 | 44.2% | 30.0% | 9.6% | 12.9% | 3.3% |
| Fire Management Today | 261 | 42.5% | 34.9% | 10.0% | 10.3% | 2.3% |
| International Journal of Wildland Fire | 240 | 38.3% | 30.4% | 9.6% | 15.0% | 6.7% |

*n only includes those that read the publications.

What is the one thing that appeals to you about each of the following publications? (Top 3 answers)

JFSP Fire Science Digest

- Quick, Short Overview
- Quick Read
- Topics and information

JFSP Synthesis of Knowledge

- Brings together a lot of information/resources into one place
- Comprehensive/In-depth
- Good Information

JFSP Fire Science Brief

- Short/Brief
- Quick Read
- Updates on current projects/research

Fire Ecology

- Peer Reviewed
- Variety of Topics
- Relevant

Fire Management Today

- Management Focus
- Relevant
- Variety of Topics

International Journal of Wildland Fire

- International Scope
- Peer Reviewed
- Good Science/Research